



Energy Management Plan Training
Centennial II Auditorium
October 8, 2007

PROGRAM OVERVIEW

- ✖ Why is Energy Conservation Important?
- ✖ What are City Departments Already Doing?
- ✖ What is an Energy Management Plan?
- ✖ Energy Saving Ideas
- ✖ Discussion

BACKGROUND - WHY ARE WE HERE TODAY?

- ✘ Mayor Mallory's Green Cincinnati Goals –
 - + Reduce Energy Usage 4% in 1 year, 10% in 4 years
- ✘ City Manager memo:
 - + each Department Director to develop an EMP
 - + OEQ to provide EMP training
- ✘ City Council motion:
 - + Climate Protection Goals
 - + Implementation Plan

WHY IS ENERGY CONSERVATION IMPORTANT?

WHY IS ENERGY CONSERVATION IMPORTANT?

- ✗ Saves Natural Resources
- ✗ Promotes Energy Independence
- ✗ Reduces Air Pollution
- ✗ Reduces Climate Change
- ✗ Saves Money

DO YOU KNOW CINCINNATI?

- ✖ Which City Department uses hydroelectric generators to produce electricity?
- ✖ Which City Department generates electricity from sunlight and wind?
- ✖ Which City Department has a biomass powered unit under construction?
- ✖ Which City Department will unveil a building with a green (vegetated) roof this month?

DO YOU KNOW CINCINNATI?

- ✖ What City Division is in year 2 of a 10 year program to cut its electricity usage by 90%?
- ✖ What 2 Departments have pledged to install solar cells within the next year?
- ✖ What 2 Departments burn used motor oil to heat a City facility?
- ✖ What City Department will unveil a new Energy Management Program during 2007?

ENERGY MANAGEMENT PLANS

Q: How does a large organization assure that all of its members are working as a team for a common goal?

A: Develop and Implement a **Management Plan**

ENERGY MANAGEMENT PLANS

Q: What are the critical components of a Management Plan?

- 1) Goals;
- 2) Objectives;
- 3) Milestones;
- 4) Responsibility/Accountability;
- 5) Training;
- 6) Funding;
- 7) Monitoring and Measuring
- 8) Continuous Improvement

ENERGY MANAGEMENT PLANS

Q: What if we already have a management system in place?

A: Great! Make sure it has all of the critical components, and then use it to manage your energy efforts.

ENERGY MANAGEMENT PLANS

Goals communicate the organization's priorities to the members of the organization.

How can our staff help us reach our destination if they don't know where we are going?

Goal – OEQ's goal is to minimize its use of energy, including electricity, natural gas, and motor fuels to the maximum extent practical without compromising OEQ's Mission.

ENERGY MANAGEMENT PLANS

Objectives are quantifiable statements of what the organization intends to accomplish.

How do we know whether we have succeeded if we don't know what our target was?

Objectives –

- 100% of staff will commit to use best efforts to conserve energy within 1 month following program initiation.
- 100% of identified, practical energy saving opportunities will be implemented within 90 days.
- Routine activities necessary to maximize energy savings will occur at least 90% of the time after the first 90 days.

ENERGY MANAGEMENT PLANS

Milestones are used to make sure we are progressing appropriately.

Milestones identify specific steps in the process that will be completed by specific dates.

Milestones –

- 1) An inventory of all Departmental energy use will be prepared – 15 days following plan implementation
- 2) A table including all potential energy saving opportunities will be prepared – 30 days following plan implementation
- 3) Each potential energy saving opportunity will be evaluated, and a decision made whether or not to adopt it – 60 days following plan implementation . . .

ENERGY MANAGEMENT PLANS

Responsibility – If you want something done, it has to be somebody's job -

- And that person has to know it's their job.

Responsibility –

- 1) The Director has overall responsibility for the Energy Mgmt Program.
- 2) Each employee is responsible for inventorying energy usage associated with their own position, and identifying potential energy saving opportunities associated with their own position. . .
- 3) The ECM is responsible for evaluating the potential energy saving opportunities, and recommending which should be implemented.
- 4) The Director, in consultation with staff, is responsible for determining which energy saving opportunities will be implemented.

ENERGY MANAGEMENT PLANS

Training gives employees the knowledge and skills necessary to perform their assigned duties.

Can be in class or on the job.

Training – All OEQ employees will attend at least 1 hour of training on energy conservation importance and methods. All OEQ employees will participate in periodic reviews of the Department's energy management efforts.

ENERGY MANAGEMENT PLANS

Funding – Many energy improvements will be low cost or no cost, and will generate savings.

For improvements with upfront costs, a source of funds should be identified.

Funding – Financial requirements to implement this Energy Management Plan are expected to be small. Expenses will be covered from the existing OEQ budget. If funding beyond the current budget is necessary, the Director will be notified. The Director is responsible for making appropriate funding available for implementation of the Energy Management Plan.

ENERGY MANAGEMENT PLANS

Monitoring and Measuring – “What gets measured gets done.”

Data is necessary to support good decision making.

Monitoring and Measuring – The ECM shall determine whether Department activities conform to the requirements of this Energy Management Plan, and report the results of that determination to the Director. Determinations shall be made monthly for the first 90 days, and quarterly thereafter.

ENERGY MANAGEMENT PLANS

Continuous Improvement processes help us learn from our experience.

Process: Plan; Do; Check; Adjust.

Continuous Improvement –

- 1) If the ECM determines that OEQ activities do not conform to this Energy Management Plan, the Director is responsible for initiating corrective action.
- 2) The Director will lead all staff in a periodic review of energy management efforts. . . . These periodic reviews shall occur at least quarterly for the first year, and at least yearly thereafter.

ENERGY MANAGEMENT PLANS

Questions?